ABSTRACT OF THE DISCLOSURE

A method of optical detection of characteristic quantities of an illuminated specimen comprising detecting a signal that is backscattered, reflected and/or fluoresced and/or transmitted from the specimen by a spatially resolving detector wherein radiation coming from the specimen is imaged on the detector, shifting the position of the radiation which is measured in a spatially resolved manner relative to the detector and determining intermediate values by an algorithm from the signals measured in different shifts for purposes of increasing the spatial resolution of the detector. An arrangement for performing the method is also disclosed.